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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Amendment of Parts 2 and 15 of the)
Commission's Rules to Deregulate)
the Equipment Authorization)
Requirements for Digital Devices)

DOCKET FILE COPY ORIGINAL

ET Docket No. 95-19

REPLY

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SUMMARY

The Commission should replace the current certification process for personal computers with a Declaration of Conformity ("DoC"), benefiting both suppliers and consumers. The Commission should not adopt its proposed requirement that the test report number and date be included in the information accompanying the product.

The Commission should not mandate laboratory accreditation. Such a requirement is unnecessary, burdensome and expensive.

The Commission should not permit marketing of untested modular computers until appropriate tests for all relevant components have been developed and empirical data demonstrates that such computers comply with the emissions limits. The Commission should, however, permit marketing of authorized components, based on appropriate tests, for substitution into types of authorized personal computers tested for compliance and identified in the marketing materials associated with those components.

Finally, the Commission should coordinate the timing of its decision in this proceeding with the Department of Commerce so as to aid, rather than undercut, Commerce's efforts to achieve equitable access to the European market for United States producers.

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REPLY

AT&T Corp. ("AT&T") respectfully submits the
following reply in response to the Commission's Notice of
Proposed Rulemaking ("NPRM"), FCC 95-46, released
February 7, 1995.

I. INTRODUCTION

The NPRM proposes to replace the present
certification process for personal computers with a
Declaration of Conformity ("DoC") executed by the
manufacturer or supplier; require emissions testing by a
laboratory accredited under the National Voluntary
Laboratory Accreditation Program ("NVLAP") operated by the
National Institute of Standards and Technology; require
authorization of personal computer Central Processing Unit
("CPU") boards, power supplies and enclosures marketed to
the public; and allow substitution of these authorized

components into existing personal computers and creation of new personal computers using them, all without testing the final product. Comments were filed by manufacturers of personal computers, testing laboratories, associations of those interests, users of the radio spectrum potentially affected by the proposed rules, and the Department of Commerce official charged with expanding opportunities for U.S. firms to export to countries of the European Union.¹

The comments contain widespread support for the DoC and make a useful suggestion for improving that process. On the other hand, Commerce raised a major concern regarding timing. There was broad opposition to any mandatory laboratory accreditation requirement and even greater opposition to mandated NVLAP accreditation. The particulars of the Commission's modular computer proposals were roundly criticized. Moreover, the commenters were sharply divided over whether any modular computer authorization process could provide reasonable assurance that the end product would comply with the emission limits.

¹ The commenting parties and the abbreviations used to identify them are listed in the Appendix.

II. THE COMMISSION SHOULD PERMIT USE OF A DOC BUT SHOULD NOT REQUIRE INCLUSION OF THE TEST REPORT NUMBER AND DATE IN THE PRODUCT DOCUMENTATION.

Other computer manufacturers,² as well as testing laboratories,³ joined AT&T in supporting the Commission's DoC proposal because, as the NPRM notes (§ 4), that process will eliminate the delay caused by the present certification process and the resulting adverse impact on the increasingly shorter market life of new personal computers.⁴ Some supporters of the DoC urged the Commission to delete the proposed requirement to include the DoC in the literature accompanying the product. Those parties noted that this aspect of the Commission's proposal would require the manufacturer to delay shipping product until the final test report is available and information setting forth the date and number thereof can be printed for insertion into product packages.⁵

² Apple (p. 2); EIA/CEG (p. 3); Gateway (pp. 2-3); HP (p. 1); ITAC (p. 2); ITI (p. 8); Intel (p. 1); IBM (pp. 1-2); Motorola (pp. 2-3); NECTECH (p. 2); SMCC (p. 1).

³ ACIL (p. 1); A2LA (p. 1); CCL (p. 1); CompTIA (p. 3); Elite (p. 1); Retlif (p. 1).

⁴ Reynolds, an individual, supported the DoC proposal on this basis.

⁵ E.g., Apple (p. 1); IBM (p. 3); ITI (p. 10); ITAC (p. 2). SA urged the Commission to clarify that the DoC does not apply to the verification process, thus insuring that this consequence will not apply. Although no such clarification is necessary, AT&T has no objection to it.

An appropriate alternative would be to require inclusion with the product of a general identification of the DoC and information on how to obtain a copy.⁶ This alternative would address the concerns of commenters who opposed the DoC proposal because of the requirement to identify specifically the test report in the product documentation.⁷ This information would still afford the buyer evidence of compliance and permit further investigation by the buyer and the Commission.⁸

Two commenters opposed the DoC procedure and suggested use of the certification process, modified to permit marketing when the application is filed rather than when the grant of authorization is issued.⁹ As AT&T pointed out (p. 5), however, this approach requires unnecessary

⁶ ITI (p. 10).

⁷ Compaq (p. 3); Sony (p. 9); TI (pp. 3-4); Unisys (p. 3). Those parties urged use of the verification process, in which no test information is provided to the customer.

⁸ CCITL's proposal (p. 2) that documentation, including a description and photographs of the equipment and the identity of the test lab, be filed with the Commission creates an unnecessary burden and will not contribute significantly to Commission enforcement efforts. The same is true for the information required to be filed pursuant to the notification procedure advocated by CES (p. 1) and WL. The Commission's DoC proposal specifies that the manufacturer must provide a copy of the test report to the Commission on demand.

⁹ AFCCE (p. 2); PCTEST (p. 1).

paper work if the device complies with the rules and permits non-complying equipment to reach the market, beyond practical recall, if the device does not in fact comply.

The only opponent to any liberalization of the present certification rules is MSTV. Although conceding that those rules increase the costs of personal computers and impose delays on the marketing thereof, MSTV claims that the highly competitive nature of the computer industry increases the risk that manufacturers will sell non-complying products and thus makes the need for vigilance no less pressing than when the present rules were adopted (p. 4). This ignores the Commission's explicit finding that:

"With industry's support, the Commission's program for controlling interference from computing devices has proven successful and has ensured that those devices do not cause interference to radio services (NPRM, ¶ 4).

Against this background, the Commission has correctly judged the regulatory burdens on computer manufacturers can be reduced without increasing the likelihood of harmful interference from such devices (id., ¶ 5).

The comments of Commerce introduce an entirely new issue not addressed in the NPRM or in any of the other comments. As did most other parties, Commerce recognized that the Commission's proposals can benefit United States

producers and consumers. However, Commerce also showed that unilateral Commission action making the DoC process available to all marketers of personal computers could undercut Commerce's efforts to achieve Mutual Recognition Agreements ("MRAs") with countries of the European Union ("EU"). Commerce explained that, absent MRAs, United States manufacturers will have to perform additional costly and time-consuming tests to show compliance with EU requirements and thus will not be able to compete in the EU on an equal footing with European manufacturers. If the proposals in the NPRM extend to European manufacturers whatever liberalizations the Commission adopts regarding marketing in this country, Commerce noted that there would be "no market access incentive for Europeans to conclude an MRA."

Commerce's conclusion is that the Commission should "provide an incentive to conclude MRAs," rather than "unilaterally changing a rule for the EU producer as well as the U.S. producer when the U.S. producer is not similarly circumstanced in the EU market." In light of commerce's comments, AT&T now proposes that the Commission coordinate the timing of its resolution of the issues in this proceeding with Commerce so as to aid Commerce's efforts to achieve MRAs with the Europeans.

III. THE COMMISSION SHOULD NOT MANDATE LABORATORY ACCREDITATION.

The overwhelming majority of the equipment manufacturers joined AT&T in opposing any mandatory laboratory accreditation program for the reasons that it is both burdensome and unnecessary.¹⁰ As ITI points out (p. 15):

There is simply no evidence to suggest that independent or manufacturers' test facilities are not generally performing satisfactory tests or that there is a laboratory accreditation process that would reasonably and effectively improve such performance" (emphasis in original)

AT&T agrees with Compaq "that the current system works"

(p. 8). Thus, there is no need for the Commission to impose the delays and expense inherent in any mandatory accreditation process.¹¹

Motorola's claim that NVLAP accreditation is a cost-effective method of ensuring the competence of the labs and thus that tested products would comply with Commission

¹⁰ Canon (p. 3); Compaq (pp. 7-8); CompTIA (p. 4); EIA (pp. 4-5); HP (pp. 3-4); ITAC (p. 3); ITI (p. 15); Intel (p. 2); IBM (pp. 8-9); NECTECH (pp. 2-3); SGI (pp. 3-4); Sony (p. 8); Spirit (p. 5); TI (p. 5); Unisys (pp. 4-5).

¹¹ Apple recognizes that the current process works satisfactorily, that there are few, if any, problems with the installed base, and that the current NVLAP process is much too burdensome and costly (p. 4). Apple suggests that the present NVLAP process be "relaxed" but provides no specifics and is unclear whether it would support requiring accreditation under a relaxed process (p. 5).

standards (p. 5) appears far-fetched. Motorola states that NVLAP has negotiated, and is negotiating, MRAs with foreign laboratory accreditation programs and asserts that a Commission-required NVLAP accreditation program will thus further the United States goal of eliminating the retesting of products sold abroad. The short answer to this is that Commerce did not support mandatory NVLAP accreditation on this basis, but merely urged that the Commission shape its rules governing product certification, laboratory accreditation, testing procedures and product evaluations to help create the incentive for affording United States manufacturers access to overseas markets on fair terms.

Although the personal computer equipment manufacturers were virtually unanimous in opposing any mandatory laboratory accreditation program, the testing laboratories were more divided. Only one, however, supported requiring accreditation by NVLAP.¹² Other laboratories proposed that accreditation mechanisms in addition to NVLAP be allowed.¹³ It is noteworthy that

¹² CCL (p. 3).

¹³ ACIL (p. 3); A2LA (p. 2); CCITL (p. 3); CES (p. 1); Elite (p. 3); CTJC (p. 5); Retlif (p. 3). PCTEST characterized the proposal for only NVLAP accreditation as "'reregulation' instead of 'deregulation'" (p. 4). One individual commenter also supported alternatives to NVLAP. Reynolds (p. 2).

several of the commenters accepting NVLAP as one alternative source of accreditation were critical of the costs and expertise of NVLAP,¹⁴ while others identified it as the most established program.¹⁵ Finally, some of the laboratories supporting mandatory accreditation did so only for independent laboratories and not manufacturers' in-house labs.¹⁶

The lukewarm endorsement of NVLAP, the concession that there is no need to require accreditation of manufacturers' laboratories, and the lack of any demonstration of need for a mandatory accreditation program should lead the Commission to reject all of the proposals by the laboratories. Those comments support ITI's point that there is no evidence that laboratories are not performing satisfactorily today or that a practical process to improve performance could be developed.

¹⁴ CCITL (p. 3); CES (p. 1). WL, which did not take a clear position, reported that NVLAP accreditation has not always guaranteed uniform results.

¹⁵ ACIL (p. 3); Elite (p. 3); Retlif (p. 3).

¹⁶ ACIL (p. 1); Elite (p. 1); Retlif (p. 1). Flying in the face of longstanding practice under the present rules, and directly contrary to the position of the independent labs themselves, MSTV urges that equipment not be authorized based on in-house laboratory testing (p. 6).

IV. MODULAR COMPUTERS COULD BE AUTHORIZED AFTER APPROPRIATE TESTS FOR ALL COMPONENTS HAVE BEEN DEVELOPED AND EMPIRICAL DATA GATHERED ON THE EMISSIONS PERFORMANCE OF SUCH COMPUTERS.

There was no support in the comments for the specifics of the Commission's modular computer proposal. AT&T's objections to those specifics, and AT&T's urging that relevant data be gathered, were echoed by many others. In light of the comments, AT&T's proposal that the modular computer concept be implemented to only a limited extent at this time is the most that can be sustained.

The Commission's proposal rests on its belief that untested modular computers containing CPU boards, power supplies and enclosures that pass the tests in the NPRM applicable to that component pose only a "small risk" of non-compliance with the emission standards in the rules (NPRM, ¶ 19).¹⁷ Many commenters joined AT&T in criticizing the specific component tests in the NPRM¹⁸ and showing that a sound modular computer scheme would require testing and authorization of components in addition to the three which are subject to the Commission's proposal.¹⁹ Of dispositive

¹⁷ The Commission does not propose to amend those standards.

¹⁸ Apple (p. 5); Gateway (pp. 9-12); Hong Kong; ITAC (p. 2); ITI (p. 23); IBM (p. 7); PCTEST (p. 3); SGI (p. 5); Sony (pp. 13-14).

¹⁹ CCITL (p. 4); Compaq (p. 9); Hong Kong; Intel (p. 3); ITI (pp. 21-22); SGI (p. 4); Unisys (p. 4); WL. Motorola supported what it called the Commission's "intention" to

(footnote continued on following page)

significance is the evidence, based on actual experience of commenters including AT&T, that personal computers assembled from components meeting applicable limits pose a significant risk of exceeding the emission limits, rather than a "small risk" as the Commission believes²⁰. Commenters potentially affected by emissions from personal computers expressed the same concerns.²¹

Even supporters of a modular computer program recognized the lack of a technical basis for it. Thus, HP, which wrote that the modular computer program "should be adopted" (p. 4), conceded that it "has learned that system compliance is more than the simple sum of the parts" and that the Commission's proposal is based on "the unproven

(footnote continued from previous page)

require "all" components, "such as" the three specified ones, to comply with technical standards (pp. 3-4); this is not what the NPRM says.

²⁰ AT&T (p. 11); AFCCE (p. 7) ("the Commission has greatly underestimated the risk of harmful interference"); CCITL (p. 5); ("no body of scientific evidence shows that an assortment of previously certified components can be bolted together and routinely comply"); CFS; Gateway (p. 8); CTJC (p. 6) (the Commission's proposal "is a dangerous leap of faith . . . without the benefit of sufficient data or experience"); SGI (p. 5) ("program . . . ignores basic engineering principles"); TI (p. 10); WL.

²¹ ARRL (p. 7) for the amateur community; MSTV (p. 8) for television broadcasters ("significantly underprotective of licensed services").

assumption" that systems will meet the emissions limits based on simple subassembly tests (id.) Two supporters of a modular computer program urged that the label the assembler must affix to the personal computer can only represent that it has been put together with authorized components, explicitly conceding that the assembler cannot represent that the system complies with the emission limits.²² ITI carefully claimed only that its approach would be a reasonable mechanism for controlling "the overall level of radio frequency being emitted from personal computers" (p. 26), not that assembled computers would indeed comply with the emissions limits.²³ TI made the point that the modular proposal "could amend the actual emission limits, albeit indirectly" (p. 10), while Apple suggests the possibility of an explicit amendment.²⁴

²² HP (p. 4); ITI (p. 25). Another supporter of the Commission's modular computer proposal argued that computers put together out of authorized components should be "assumed" to be compliant, but recognized that sometimes they would not be (CompTIA, p. 5).

²³ Intel stated that such computers "will likely meet the essential requirements" of the rules in that they will not cause harmful interference to radio and television broadcasts (p. 3).

²⁴ Apple's idea is the separate components be tested against the Class B emission limits and a complete system tested against the looser Class A limits (p. 6). Reynolds makes the same suggestion.

The comments plainly demonstrate that at this time the Commission should not adopt its proposal to permit marketing of untested personal computers put together out of authorized components. AT&T made a more modest proposal that affords the Commission some opportunity to start down the modular computer road. AT&T proposed that the Commission develop separate tests for all personal computer components, authorize such components based on passing such tests, and allow manufacturers to market such components for use in types of authorized systems identified in the manufacturer's marketing materials.²⁵ Because those materials must be based on testing one or more modified units of each such type, and because an authorized computer is the starting point of this substitution process, there may indeed be only a "small risk" that the upgraded system will not comply with the emission limits.

As discussed above, commenters pointed out the absence of empirical data supporting the Commission's modular computer proposal. AT&T suggested that, after the necessary tests for components have been developed and complying components exist, empirical data be gathered on an adequate sample of computers assembled out of such

²⁵ In the same vein, ITAC suggested that the Commission consider applying the DoC process only to upgrading the CPU module in existing CPU boards (p. 2).

components.²⁶ If that data shows that there is little risk that such computers will exceed the emissions limits, then the modular computer proposal should be adopted. This is better than HP's proposal that the Commission have a "marketplace auditing program" to collect data after assembled computers are being sold (p. 4). If the results are what many commenters think they will be -- assembled computers sometimes exceed the emissions limits by a substantial margin -- after-the-fact data gathering will be too late.

CONCLUSION

The Commission should adopt the DoC proposal for authorizing personal computers, modified to eliminate the requirement that test report number and date be included in the product documentation. The Commission should not mandate laboratory accreditation. The Commission should not permit marketing of assembled personal computers using authorized components until data is gathered showing that there is little risk that such computers will exceed the emissions limits. Finally, the Commission should coordinate with Commerce so that resolution of this proceeding does not impair Commerce's activities to help United States computer

²⁶ CTJC made essentially the same proposal (p. 6).

manufacturers gain access to overseas markets on equitable terms.

Respectfully submitted,

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Dated: July 5, 1995

APPENDIX

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American Radio Relay League, Inc. - ARRL

Apple Computer, Inc. - Apple

Association of Federal Communications Consulting
Engineers - AFCCE

Association for Maximum Service Television - MSTV

Canon, Inc. - Canon

Coalition of Concerned Independent Testing
Laboratories - CCITL

Communication Certification Laboratory - CCL

Compaq Computer Corporation - Compaq

Compliance Engineering Services, Inc. - CES

Computing Technology Industry Association - CompTIA

Consumer Electronics Group of the Electronic
Industries Association - EIA/CEG

Elite Electronic Engineering Company - Elite

Gateway 2000, Inc. - Gateway

Hewlett-Packard Company - HP

Hong Kong Economic and Trade Office - Hong Kong

Information Technology Association of Canada - ITAC

Information Technology Industry Council - ITI

Intel Corporation - Intel

International Business Machines Corporation - IBM

Carl T. Jones Corporation - CTJC

Motorola, Inc. - Motorola

NEC Technologies, inc. - NECTECH

PCTEST Engineering Laboratory, Inc. - PCTEST

Retlif Testing Laboratories, Inc. - Retlif

Bruce Reynolds - Reynolds

Scientific-Atlanta, Inc. - SA

Silicon Graphics, Inc. - SGI

Richard Smith - Smith

Sony Electronics, Inc. - Sony

Spirit Technologies, Inc. - Spirit

Sun Microsystems Computer Company - SMCC

Texas Instruments Incorporated - TI

Unisys Corporation - Unisys

United States Department of Commerce, International
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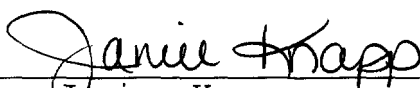
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